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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/936,729

09/17/2001

Kazuyuki Miya

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07/19/2004

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EXAMINER

HOOSAIN, ALLAN

ART UNIT

PAPER NUMBER

2645

DATE MAILED: 07/19/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/936,729

Applicant(s)

MIYA, KAZUYUKI

Examiner

Allan Hoosain

Art Unit

2645

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-8 are rejected under 35 U.S.C. 102(e) as being anticipated by **Kobayakawa et al.** (6,064,338).

As to Claim 1, with respect to Figures 1-5, **Kobayakawa** teaches a radio base station apparatus comprising:

AWC (reception weight setting means) for setting a plurality of reception weights (Figure 3, label and 4);

RVs (adaptive array antenna receiving means) for performing adaptive array antenna reception of signals from said plurality of communication terminals in directional patterns formed with said reception weights (Figure 3, labels 1 and 2); and

searcher (path search means) for combining power addition values for each directional pattern received by an adaptive array antenna and creating a vector and matrix (delay profile) (Figure 3, label 32 and 3),

performing finger assignment using this delay profile (Col. 9, lines 65-67), and

Art Unit: 2645

outputting despreading timing used in weight control for adaptive array antenna reception (Col. 10, lines 1-7).

As to Claims 2-3,5-7, with respect to Figures 1-5, **Kobayakawa** teaches a radio base station apparatus comprising:

AWC (reception weight calculating means) for grouping users into sectors (a plurality of communication terminals) and finding a reception weight for each sector (group) (Col. 6, line 65 through Col. 7, line 5 and Figure 3, label 4);

RVs (adaptive array antenna receiving means) for performing adaptive array antenna reception of signals from said plurality of communication terminals in directional patterns formed with said reception weights (Figure 3, labels 1 and 2); and

Searcher (path search means) for combining power addition values for each directional pattern received by an adaptive array antenna and creating a vector and matrix (delay profile) (Figure 3, label 32 and 3),

performing finger assignment using this delay profile (Col. 9, lines 65-67), and
outputting despreading timing used in weight control for adaptive array antenna reception (Col. 10, lines 1-7).

As to Claim 4, **Kobayakawa** teaches the radio base station apparatus according to Claim 1, further comprising threshold value decision means for making matched filter (a threshold value) decision with respect to correlation (a power addition value), wherein said path search means finds a power combination value from output after said threshold value decision (Figure 7).

Art Unit: 2645

As to Claim 8, **Kobayakawa** teaches the limitations as recited and rejected for claims 2 and 4.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Huang (US 6,385,185) teaches generating coherent channel estimates for signals received at a base station.

Uesugi et al. (US 6,526,271) teach a system for improving system capacity using signal cancellation.

4. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231
or faxed to:

(703) 872-9314, (for formal communications intended for entry)

Or:

(703) 306-0377 (for customer service assistance)


Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Allan Hoosain** whose telephone number is (703) 305-4012. The examiner can normally be reached on Monday to Friday from 8 am to 4:30 pm.

Art Unit: 2645

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Fan Tsang**, can be reached on (703) 305-4895.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.


Allan Hoosain
Primary Examiner
7/12/04